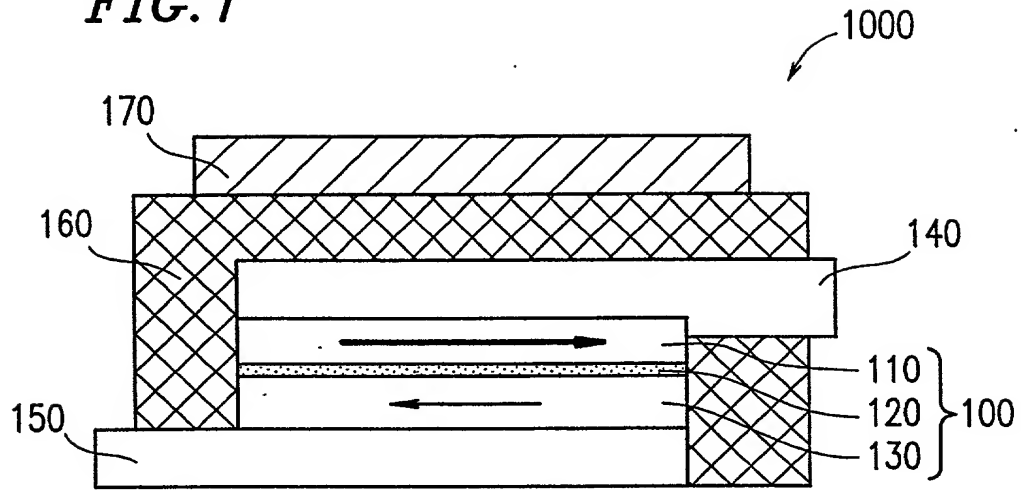


**FIG. 1**



**FIG. 3**

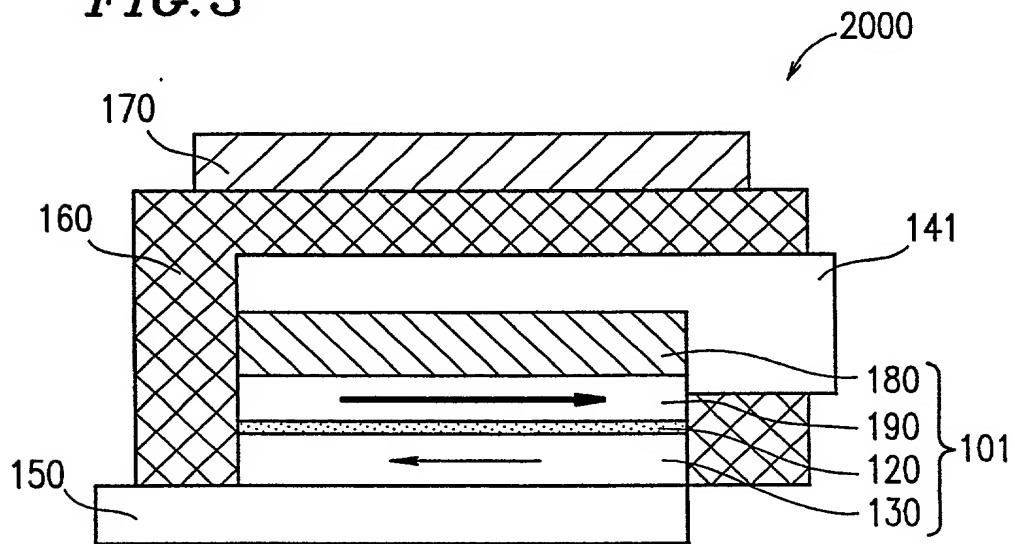


FIG. 2A

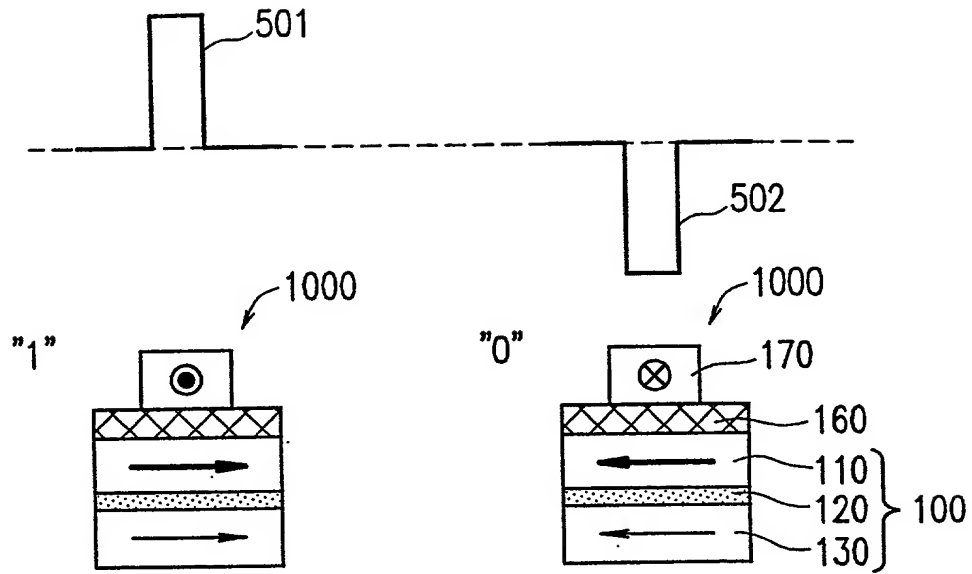


FIG. 2B

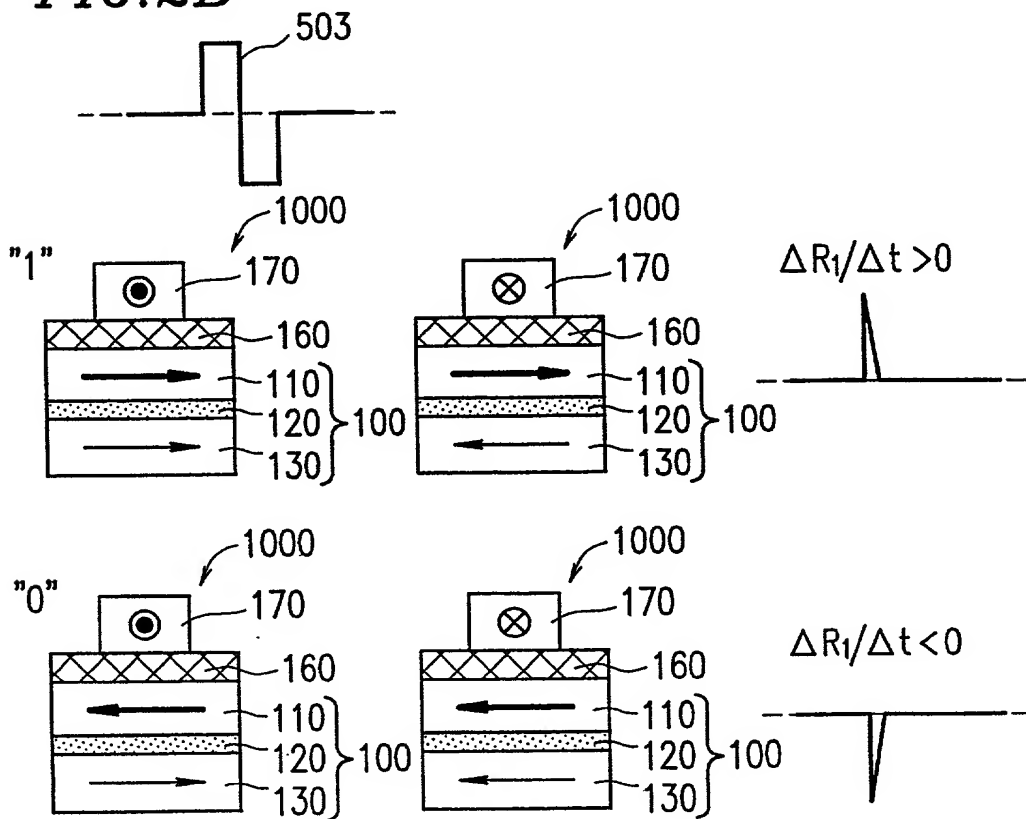


FIG. 4A

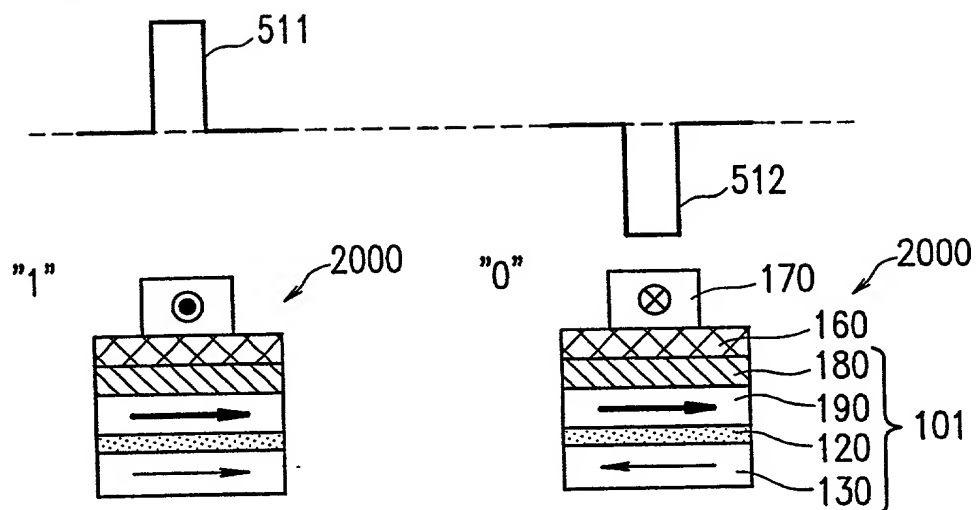


FIG. 4B

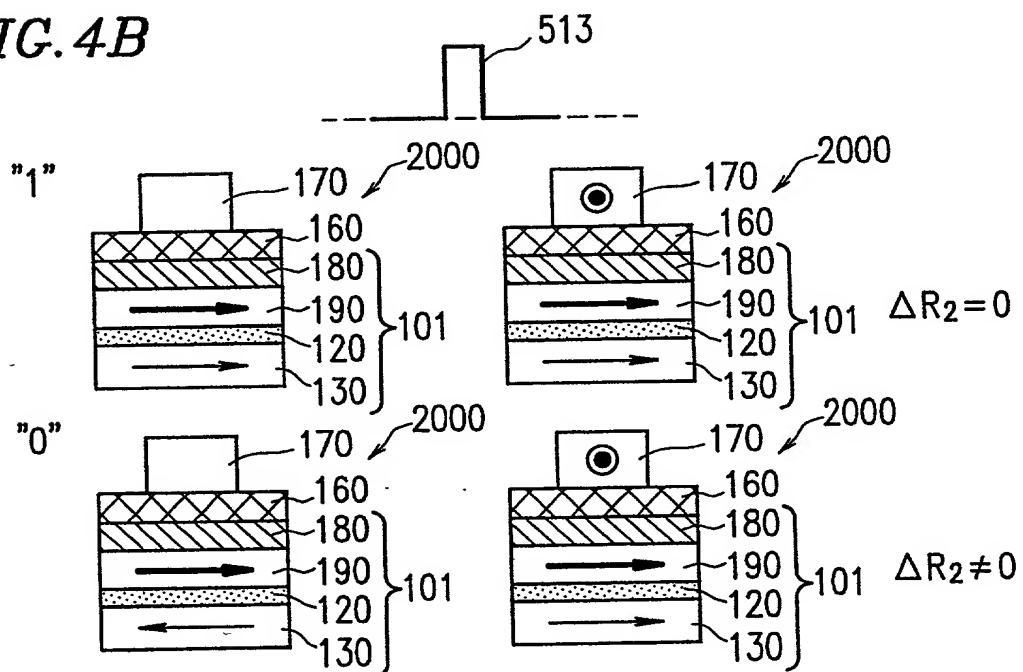


FIG. 4C

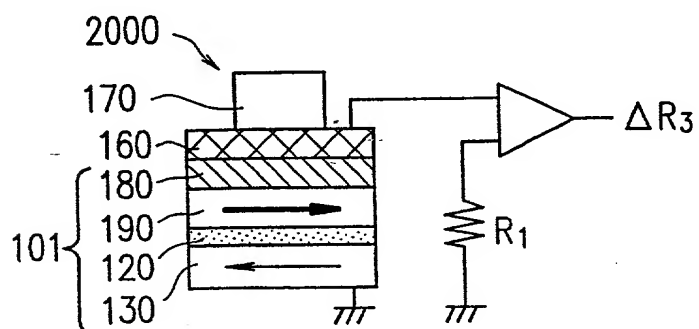


FIG. 5A

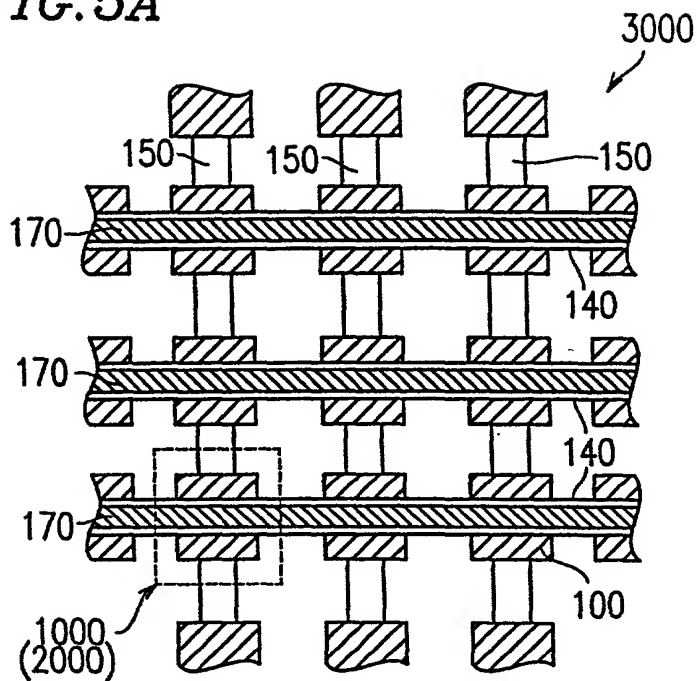


FIG. 5B

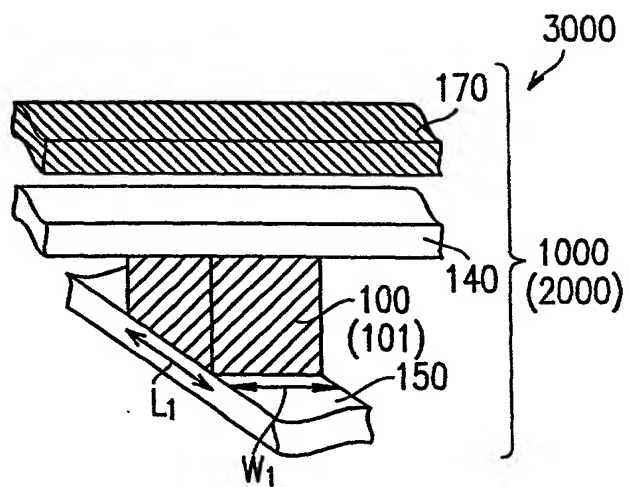


FIG. 5C

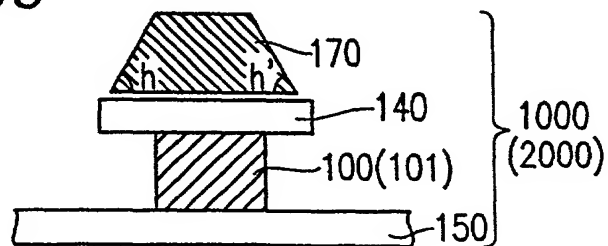


FIG. 6A

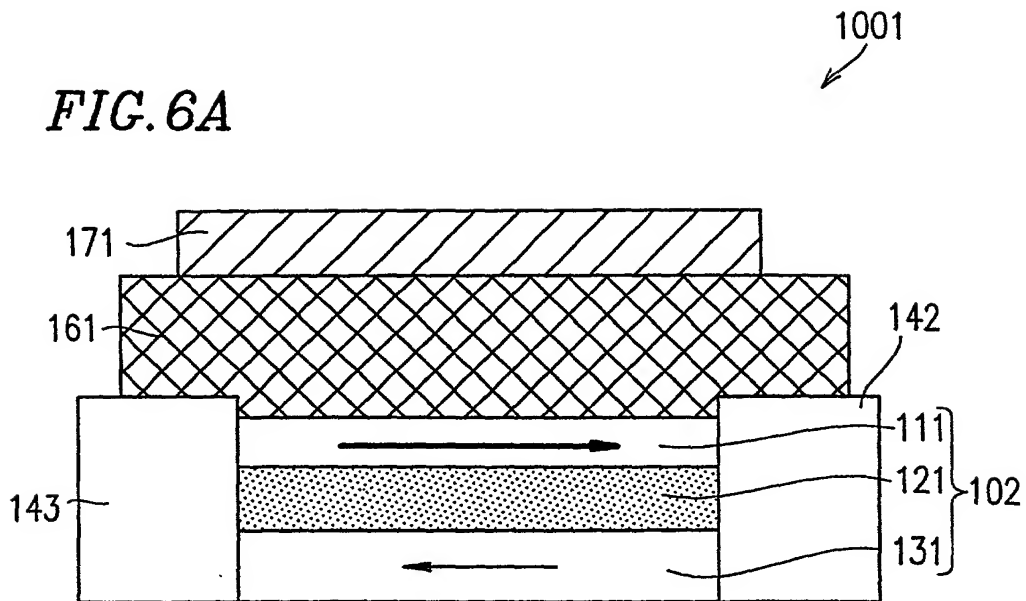


FIG. 6B

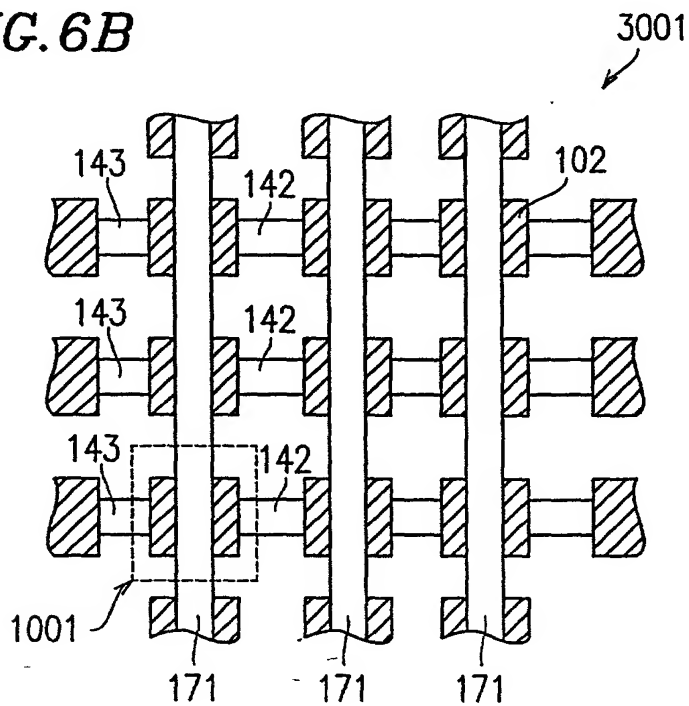


FIG. 7A

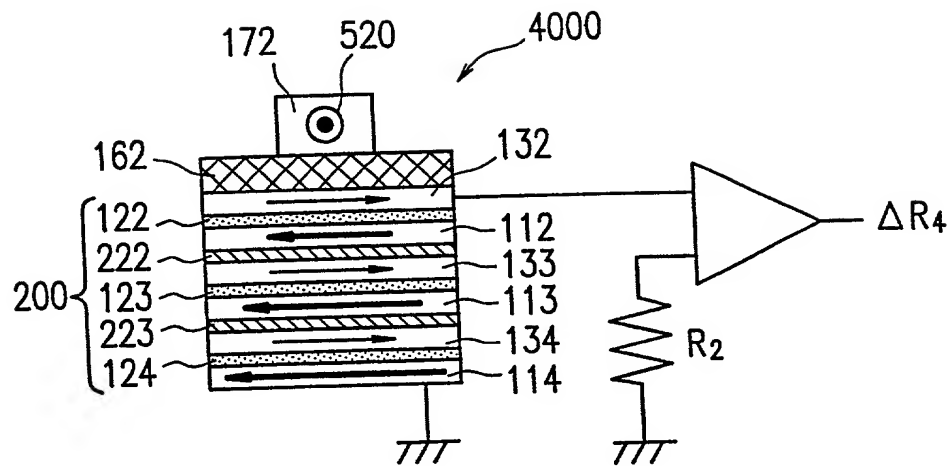


FIG. 7B

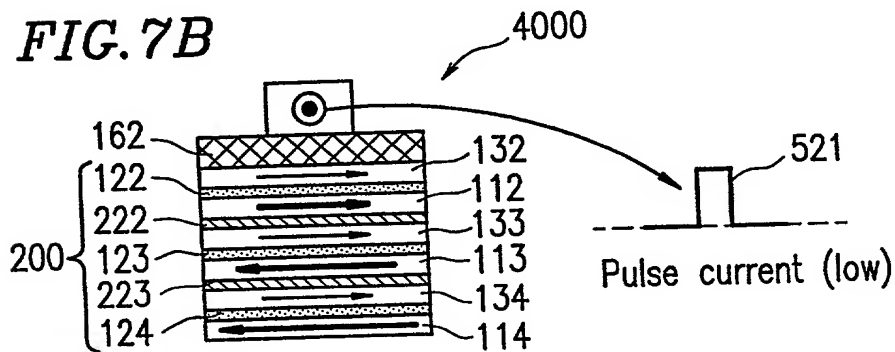


FIG. 7C

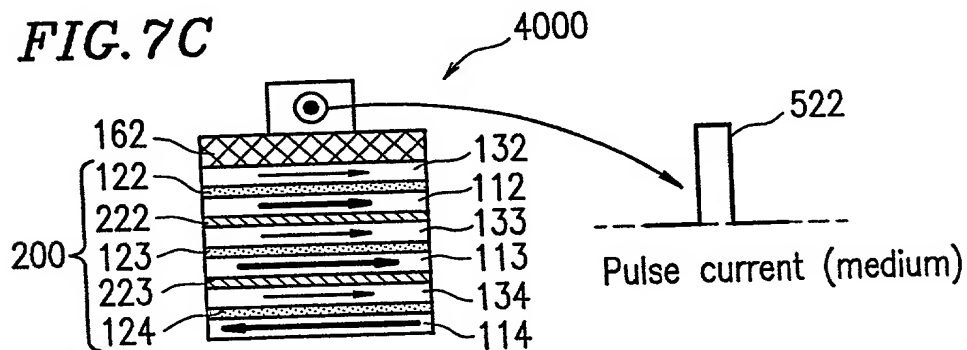
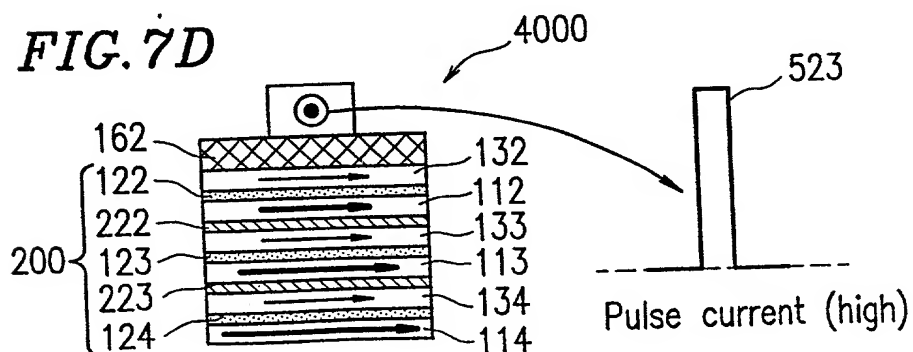


FIG. 7D



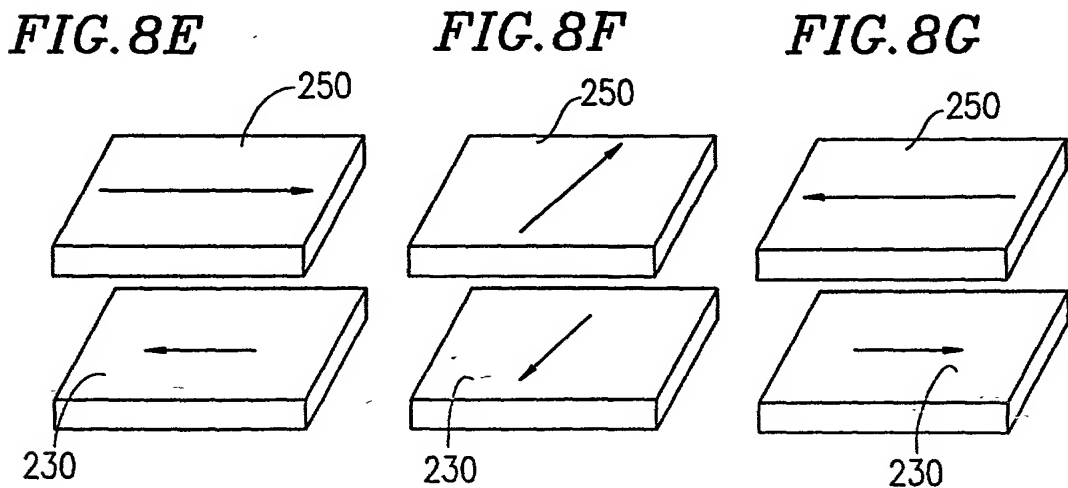
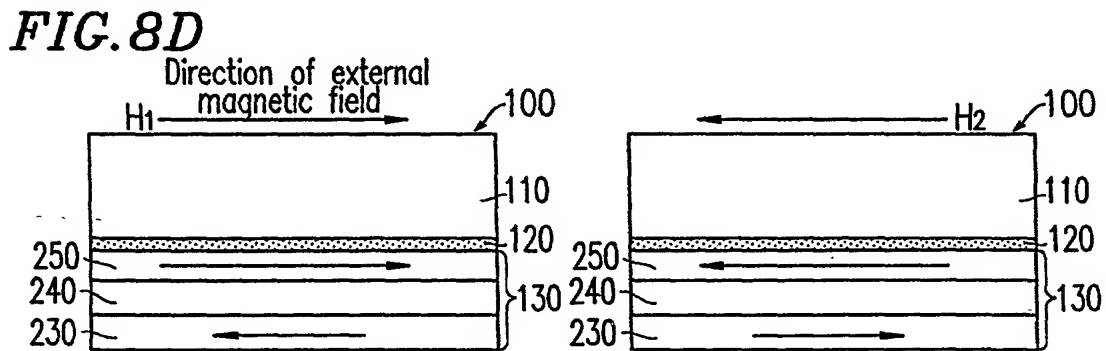
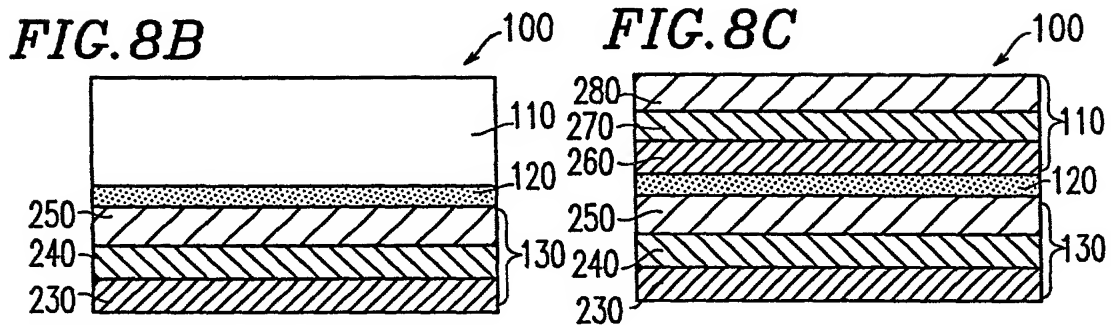
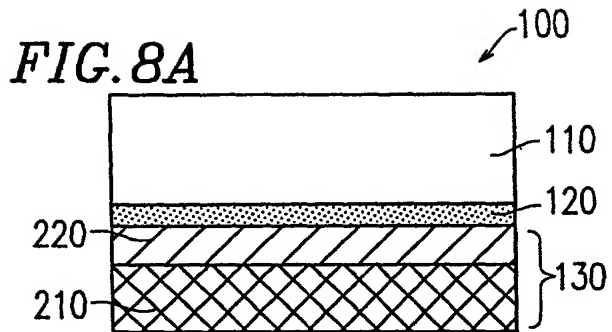


FIG. 9A

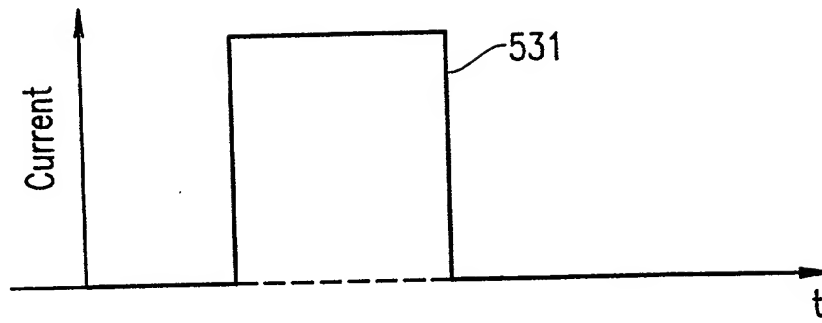


FIG. 9B

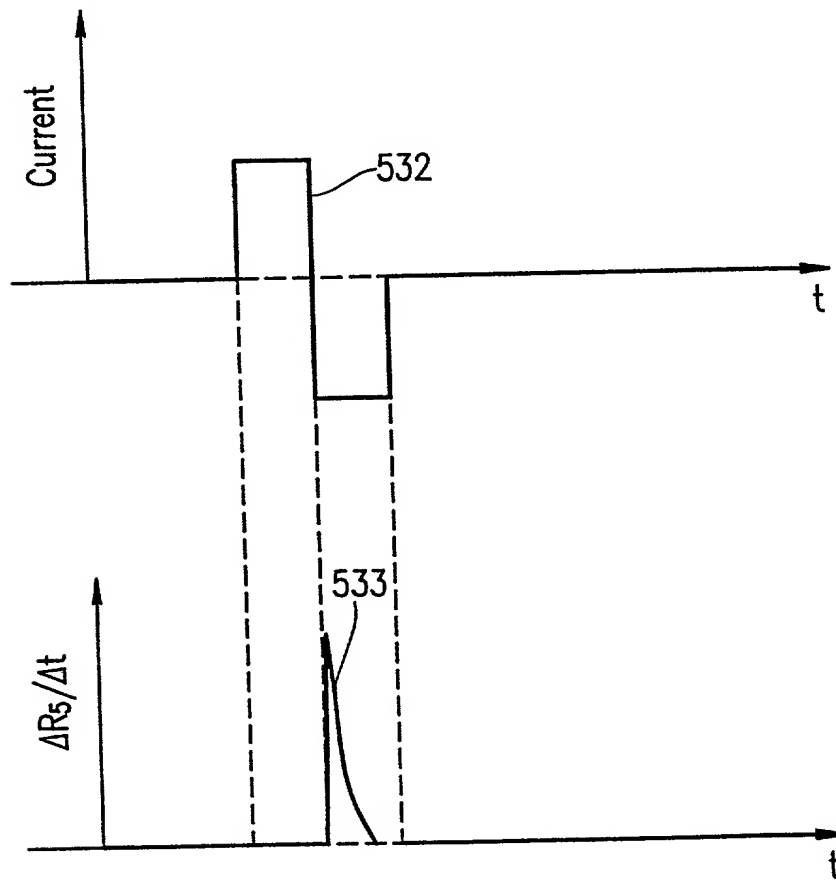




FIG. 10A

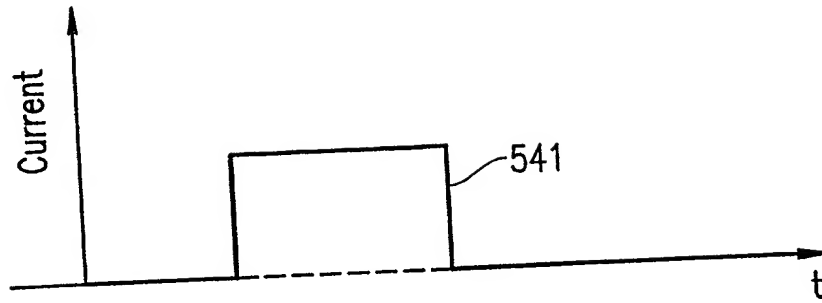


FIG. 10B

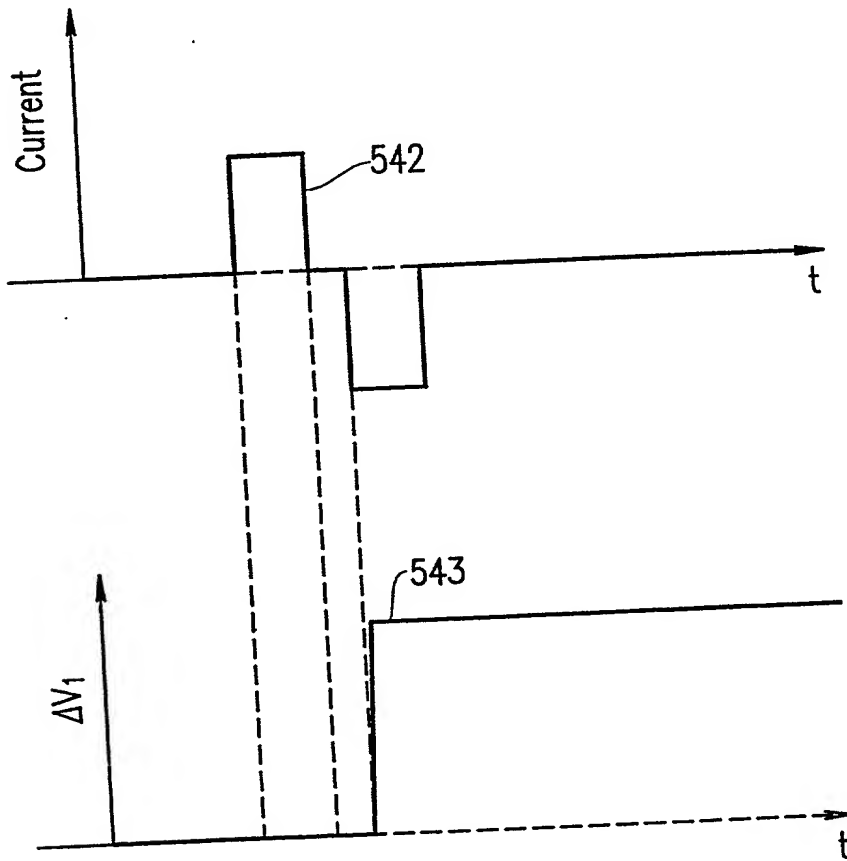


FIG. 11A

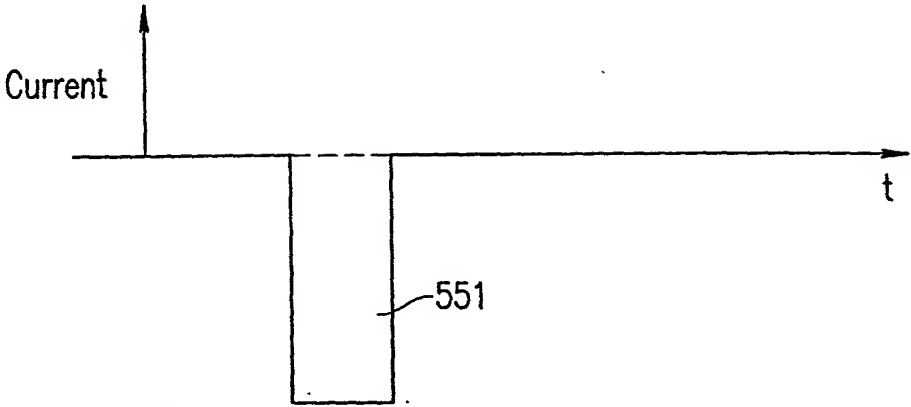
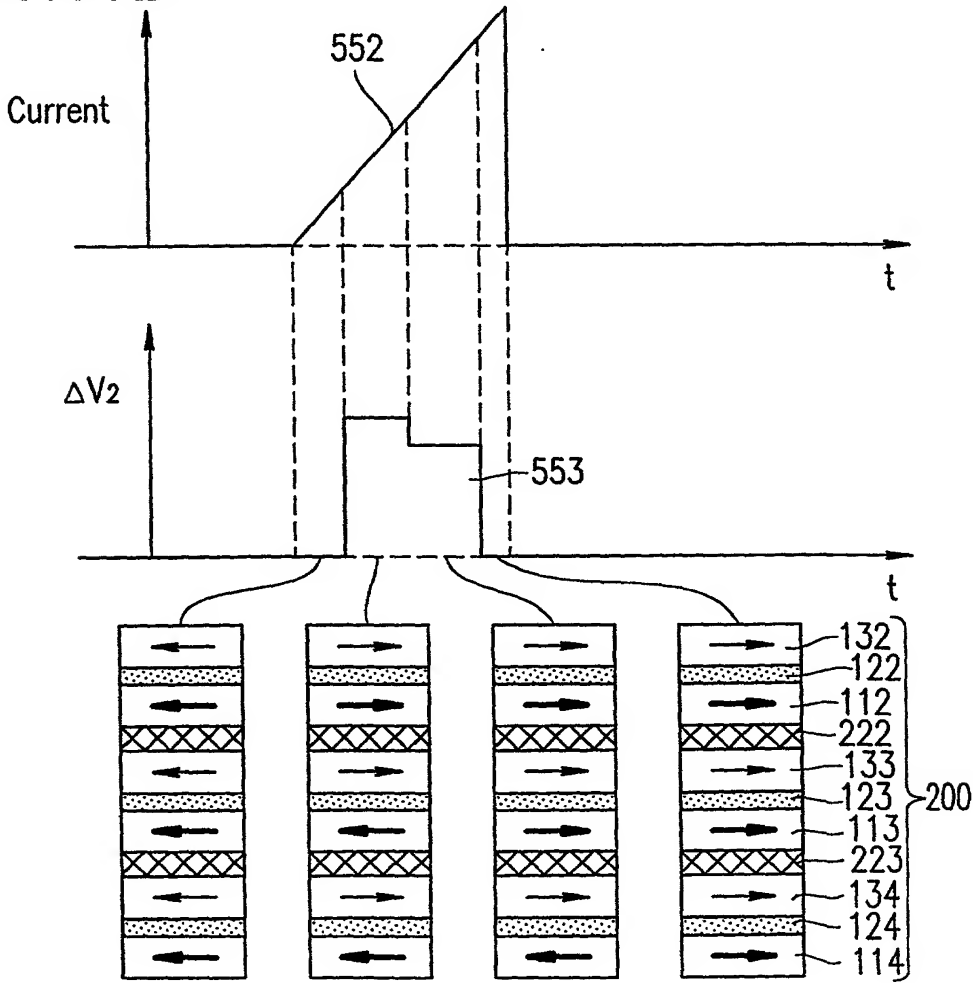
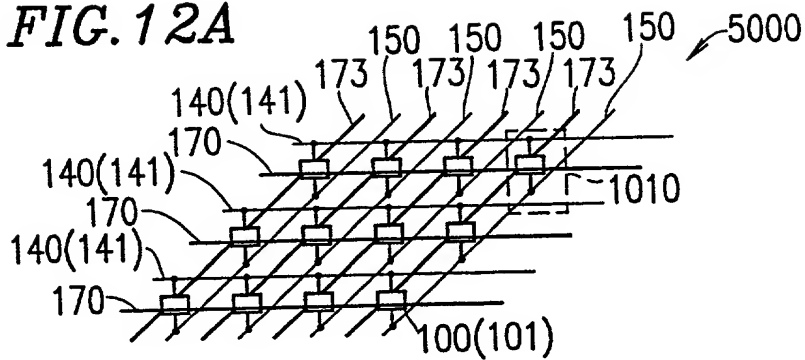


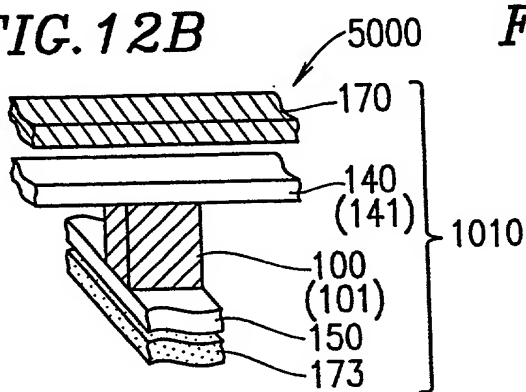
FIG. 11B



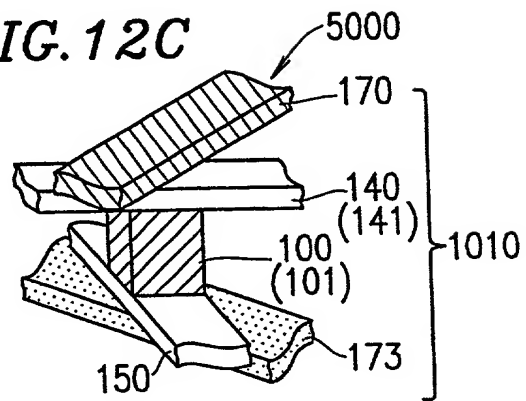
**FIG. 12A**



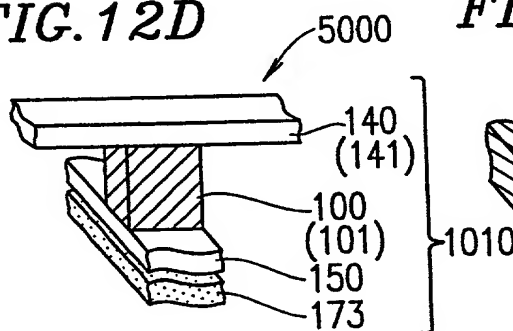
**FIG. 12B**



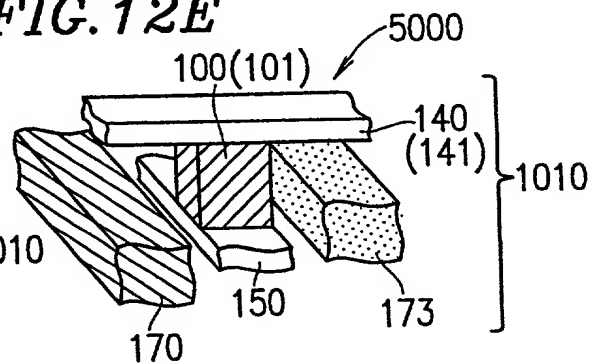
**FIG. 12C**



**FIG. 12D**



**FIG. 12E**



**FIG. 12F**

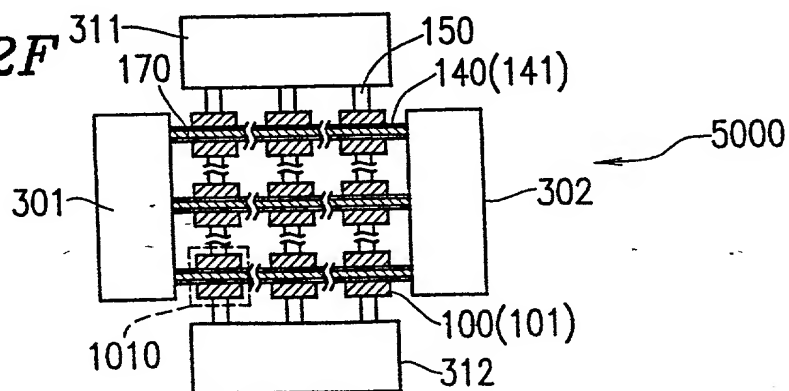
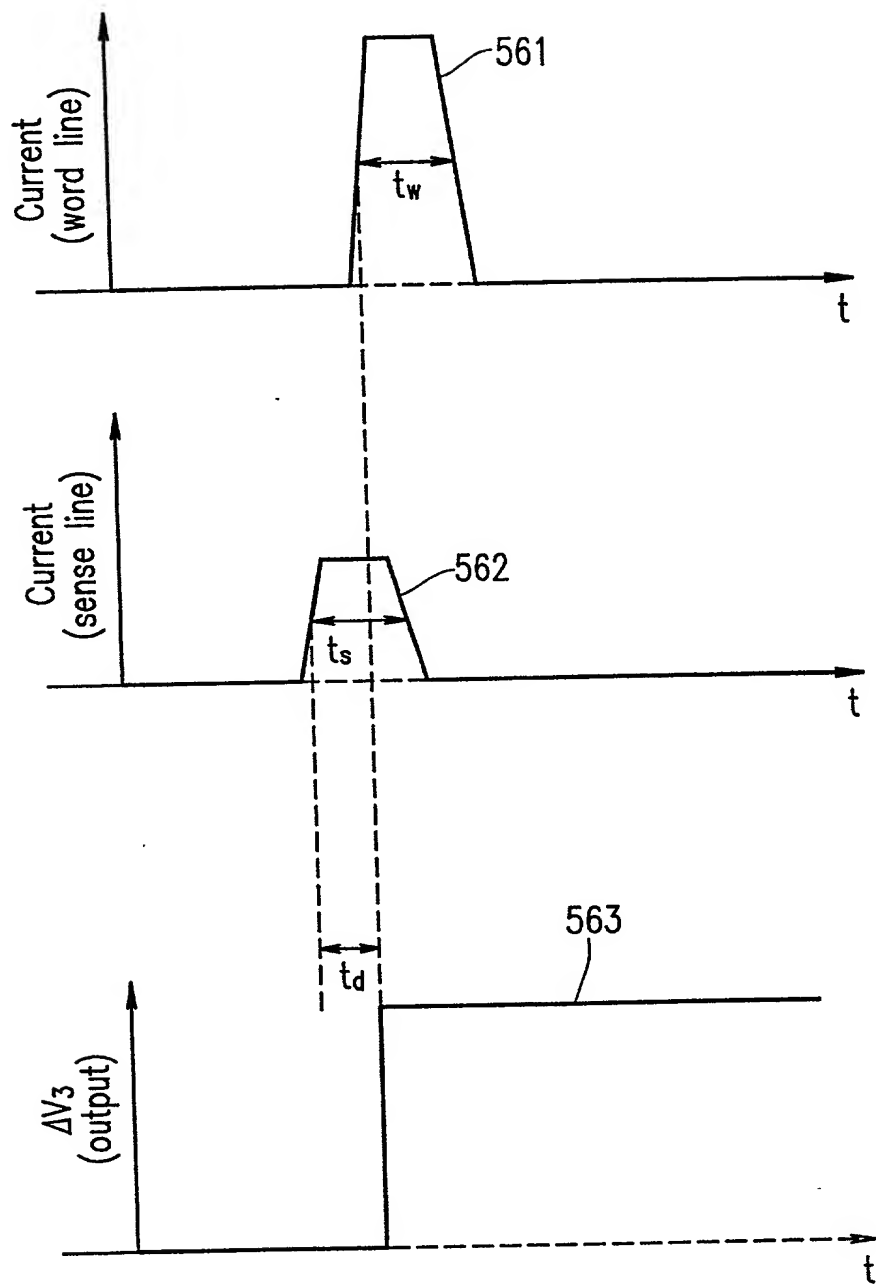
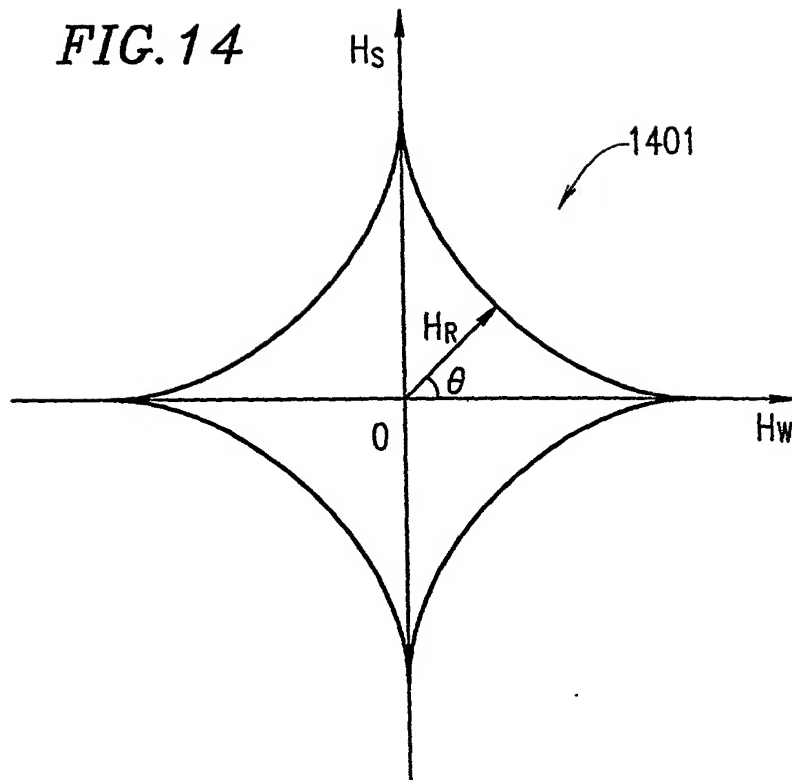


FIG. 13



**FIG. 14**

$H_W$ : Magnetic field generated by word line  
 $H_S$ : Magnetic field generated by sense line  
 $H_R$ : Synthesized magnetic field  
 $\theta$ : Angle of  $H_R$  with respect to  $H_W$

FIG. 15A

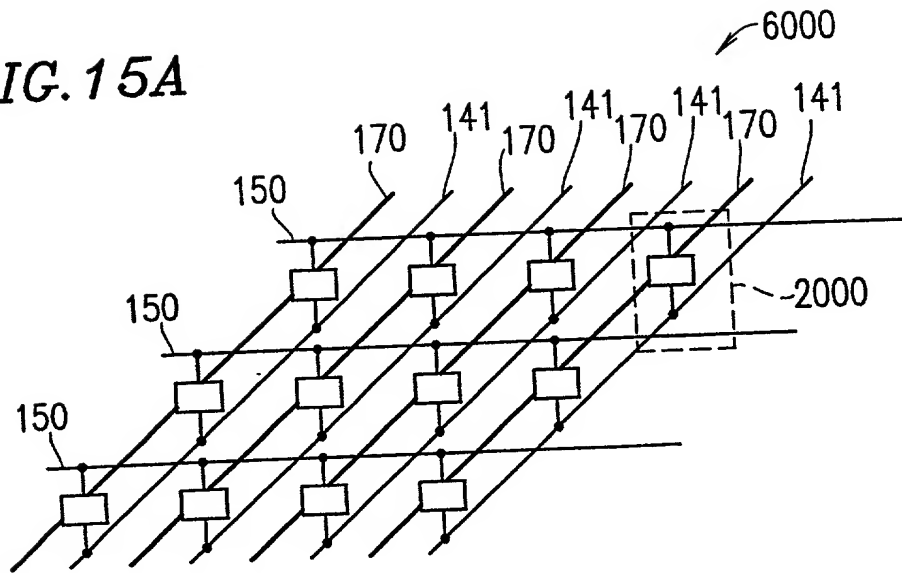


FIG. 15B

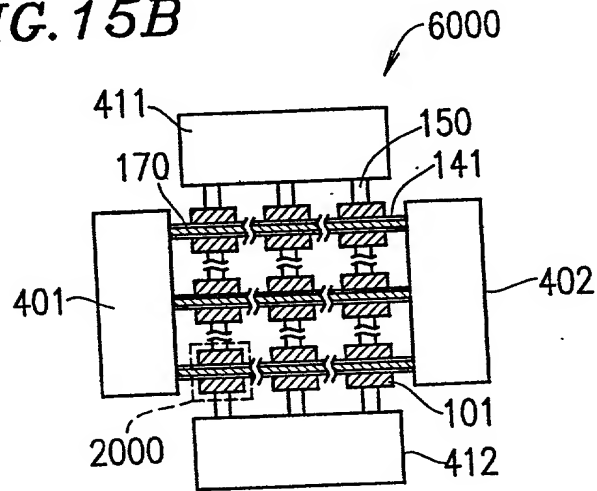


FIG. 16A

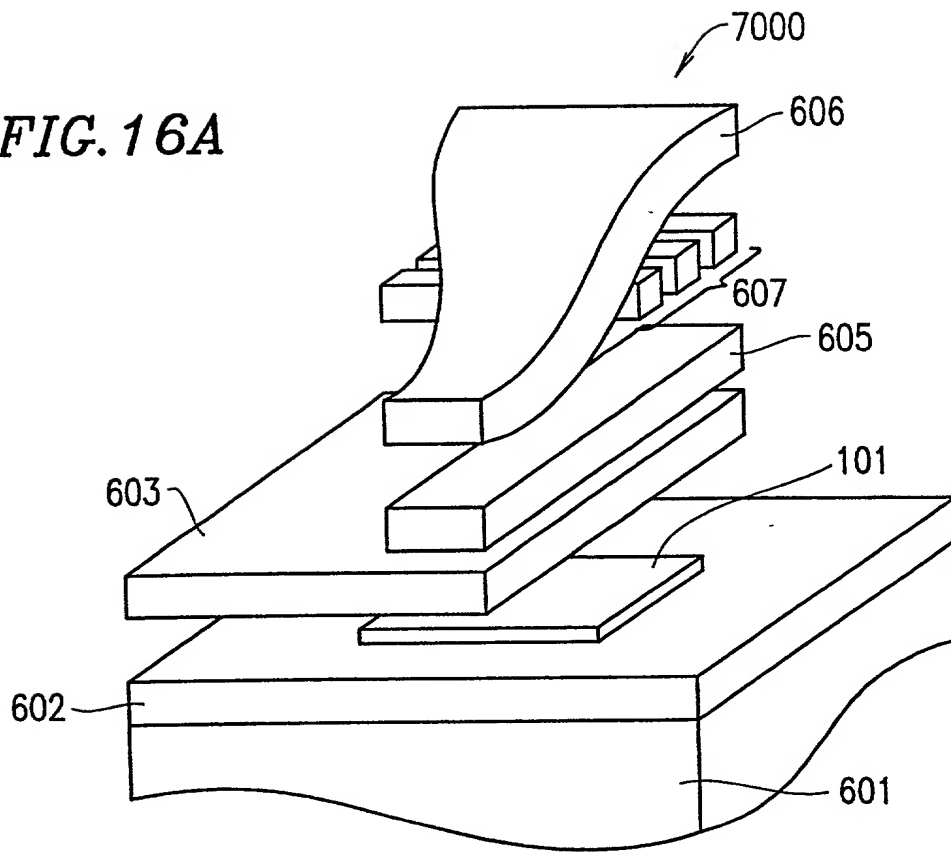


FIG. 16B

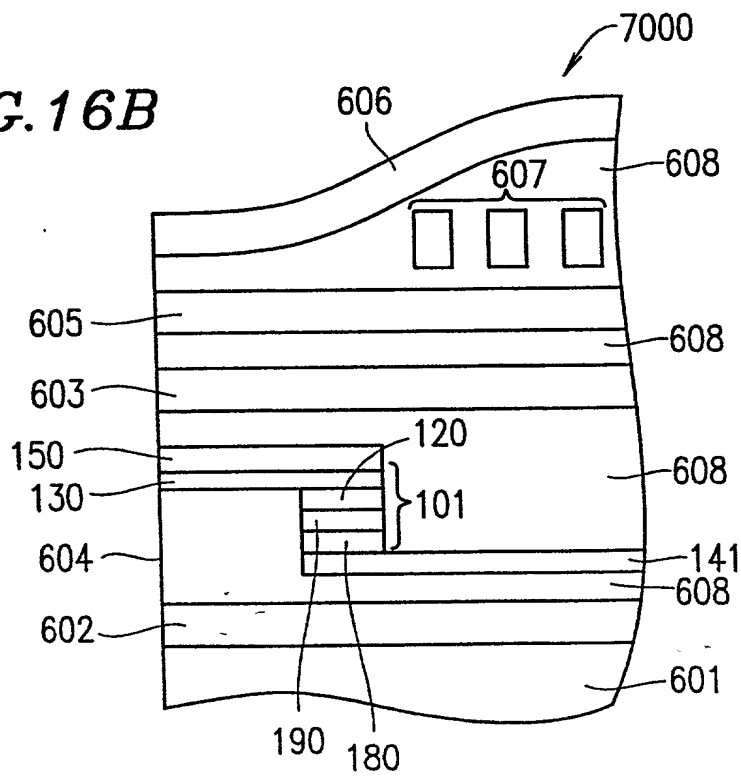


FIG. 17A

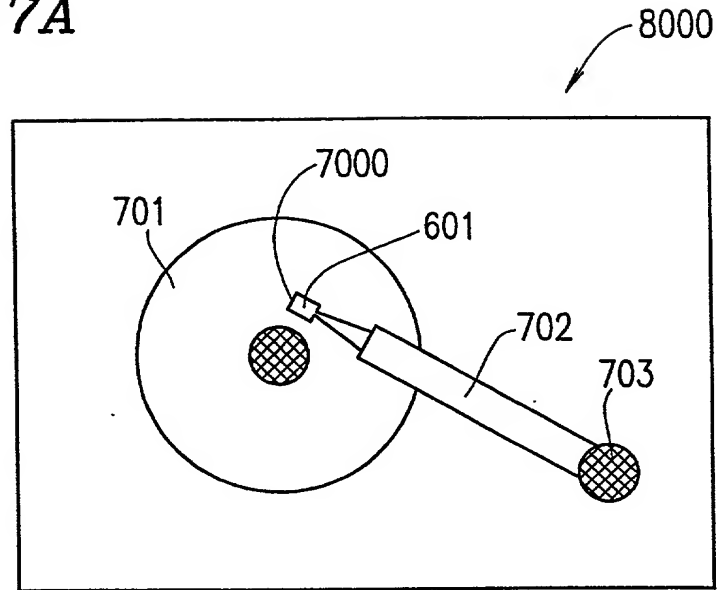


FIG. 17B

